

first part of the new volume of the Transactions of the Society, would be published in a few days.

Mr. Vaughan reported the death of Mr. Prinsep, of Calcutta, a member of the Society.

On motion, it was resolved, that a Committee be appointed to arrange the Franklin Papers deposited with the Society, (see Proceedings, No. XII, p. 253,) and to report a plan for the better preservation of the Manuscripts of the Society.

Dr. Dunglison, Reporter, presented No. 12 of the printed Bulletin of the Proceedings of the Society for May, June, and July, 1840.

Stated Meeting, September 18.

Present, twenty-six members.

DR. PATTERSON, and subsequently DR. CHAPMAN, Vice Presidents, in the Chair.

The following donations were received:—

FOR THE LIBRARY.

- Transactions of the Geological Society of London. Second Series. Vol. V. Part 3. 4to. London, 1840.—*From the Society.*
- Transactions of the Zoological Society of London. Vol. II. Part 4. 4to. London, 1840.—*From the Society.*
- Proceedings of the Zoological Society of London. Part VII. 1839. 8vo.—*From the same.*
- Reports of the Council and Auditors of the Zoological Society of London; read at the annual general meeting, April 29, 1840. 8vo. London, 1840.—*From the same.*
- Flora Batava of Afbeelding en Beschryving van Nederlandsche Gewassen, door Jan Kops, Hoogleeraar te Utrecht, u. s. w. en F. A. W. Miquel. 4to. 119 Aflevering. 5 Platen. 4to. Amsterdam.—*From his Majesty the King of the Netherlands.*
- Medicinisches Schriftsteller-Lexicon der jetzt lebenden Aerzte, Wundärzte, Geburtshelfer, Apotheker, und Naturforscher aller gebil-

deten Völker. Von Adolph Carl Peter Callisen, Doctor der Medicin und Chirurgie, u. s. w. Bänd. 1–21. 8vo. Copenhagen, 1830–35. Die anonymischen Schriften, mit Einschluss der Cholera, der Homöopathie, der Pharmacopöen, Arzneitaxen und allgemeinen Medecinalordnungen, Zeitschriften, gesellschaftschriften und gesammelte Schriften mehrerer Verfasser. Bänd. 22–25. 8vo. Copenhagen, 1835, 1837. Nachtrag enthaltend: Berichtigungen, Ergänzungen, die neuere Literatur, und die seit 1830 verstorbenen medicinischen Schriftsteller, mit einigen Beiträgen von den Herren Doctoren: dem Hofrathe Choulant, dem Leibchirurgen Koberwein, dem Director der Königsbergischen Hebammen-Lehranstalt Richter, dem Archiater und Étatsrathe A. von Schönberg. Bänd. 26, 28. 8vo. Copenhagen, 1838–40.—*From the Author.*

A Dictionary of the Anglo-Saxon Language, &c. &c., with a preface on the Origin and Connexion of the Germanic Tongues; a Map of Languages, and the Essentials of Anglo-Saxon Grammar. By the Rev. J. Bosworth, LL.D., Dr. Phil. of Leyden, &c. &c. Royal 8vo. London, 1838.—*From the Author.*

Memoirs illustrating the History of Jacobinism. A Translation from the French of the Abbé Barruel. Part 1. Vol. 1. The Anti-Christian Conspiracy. Part 2. Vol. 2. The Anti-Monarchical Conspiracy. Part 3. Vol. 3. The Anti-Social Conspiracy. 8vo. Hartford and New York, 1799.—*From Mr. Du Ponceau.*

A Star in the West; or a Humble Attempt to Discover the long lost Ten Tribes of Israel, preparatory to their return to their beloved City, Jerusalem. By Elias Boudinot, LL.D. 8vo. Trenton, N. J., 1816.—*From the same.*

Biography and History of the Indians of North America; comprising a General Account of them, and Details in the Lives of all the most Distinguished Chiefs and others, who have been noted among the various Indian Nations upon the Continent; also a History of their Wars, &c. &c. By Samuel G. Drake, Member of the New Hampshire Historical Society. Third Edition, with large additions and corrections, and numerous engravings. 8vo. Boston, 1834.—*From the same.*

Études Physiologiques et Pathologiques sur les Organes de la Voix Humaine, Ouvrage auquel l'Académie Royale des Sciences a Décerné un des Prix de Médecine fondés par M. Montyon. Par

- F. Bennati, Docteur en Médecine et en Chirurgie des Facultés de Vienne, &c. &c. 8vo. Paris, 1823.—*From the same.*
- Memoirs of My Own Times. By General James Wilkinson. Three Vols. 8vo. Philadelphia, 1816.—*From the same.*
- Traductor Ingles, ó Sistema Práctico i Teórico para aprender á traducir la Léngua Inglesa por Médio de la Española. Por Mariano Cubí i Soler, Catedratico de Idiomas Modernos en el Coléjio de la Louisiana, Segunda Edicion, Correjada i Mejorada. 8vo. Cambridge.—*From the Author.*
- An Historical and Statistical Account of New South Wales, both as a Penal Settlement and British Colony. By John Dunmore Lang, D.D., Senior Minister of the Scots Church, &c. &c. Second Edition. 2 vols. 8vo. London, 1837.—*From the Author.*
- A Treatise on the Yellow Fever, as it appeared in the Island of Dominica, in the Years 1793-4, 5, 6; to which are added, Observations on the Bilious Remittent Fever, on Intermittents, Dysentery, and some other West India Diseases; also the Chemical Analysis and Medical Properties of the Hot Mineral Waters on the same Island. By James Clark, M.D., F.R.S.E., &c. &c. 8vo. London, 1797.—*From Mr. Vaughan.*
- The Possibility of Approaching the North Pole Asserted. By the Hon. D. Barrington. A new Edition, with an Appendix, containing Papers on the same subject, and on a Northwest Passage. By Colonel Beaufoy, F.R.S. Illustrated with a Map of the North Pole, according to the latest Discoveries. 8vo. New York. 1818.—*From the same.*
- Besançon's Annual Register of the State of Mississippi, for the Year 1838, completed from Original Documents and Actual Surveys, &c. &c. Vol. 1. 12mo. Natchez, 1838.—*From Mr. C. G. Forshey.*
- Tijdschrift voor Natuurlijke Geschiedenis en Physiologie. Uitgegeven door J. Van der Hoeven, M.D., Prof. te Leiden, en W. H. Vriese, M.D., Prof. te Amsterdam. Zesde Deel. 4. Stuk. 1839.—*From the Editors.*
- Mow Yih Tung Che. A Treatise on Commerce. (In Chinese.) 8vo. with a Map of the Southern Hemisphere. By Mr. Gutzlaff. [This work is founded on M'Culloch's publication.]
- Institut Royal de France, (État actuel, Liste et Adresses de MM. les Académiciens, &c.) 24mo. Pour l'année, 1840.—*From Mr. Warden.*

Pamphlets. 1. Institut Royal de France. Académie Royale des Sciences. *a.* Funérailles de M. Turpin; Discours de M. Le Baron de Silvestre, 5 Mai, 1840. *b.* Funérailles de M. Brochant de Villiers; Discours de M. Al. Brongniart, 19 Mai, 1840. *c.* Funérailles de M. le Lieutenant Général du Génie, Vicomte Rogniat; Discours de M. Becquerel, 11 Mai, 1840. *d.* Funérailles de M. Robiquet; Discours de M. Chevreul, Mai 2, 1840. *e.* Funérailles de M. Poisson; Discours de M. Arago, 30 Avril, 1840, et Discours de M. Cousin, 30 Avril, 1840. 2. Institut Royal de France. Académie des Sciences Morales et Politiques. Sujets de Prix et Programmes adoptés par l'Académie pour être mis au concours des Années, 1840-41 & 42. 3. Institut Royal de France. Séance Publique Annuelle des Cinq Académies, du Samedi, 2 Mai, 1840, &c. 4. Institut Royal de France. Académie Française; Séance Publique du Jeudi, 11 Juin, 1840. 5. Règlements de la Société Royale des Antiquaires de France, 1840. 6. Rapport sur les Opérations de la Campagne de la Corvette l'Astrolabe, depuis le départ de Rio Janeiro jusqu'à l'Arrivée à Valparaiso. 7. Rapport fait à la Société d'Encouragement pour l'Industrie Nationale, par M. le Vicomte Héricart de Thury, &c. sur le procédé proposé par M. C. P. Brard, &c. pour reconnaître immédiatement les Pierres qui ne peuvent point résister à la Gelée, et que l'on désigne ordinairement par les Noms de *Pierres Gelives* ou *Pierres Gelisses*. 4to. Paris, 1824. 8. Société Asiatique; Discours et Rapport lus dans la Séance Générale annuelle du 28 Avril, 1825, &c. 8vo. Paris, 1825.—*From the same.*

A Monograph of the Limniades, and other fresh water Univalve Shells of North America. By S. Stehman Haldeman, Member of the Philadelphia Academy of Natural Sciences. No. 1. July, 1840. 8vo.—*From the Author.*

List of Optical Instruments to be found in the Optical Institute of Utzschneider and Fraunhofer, München; with the prices. (In French and German.)—*From Mr. Justice.*

The Committee, consisting of Dr. Bache, Prof. Bache, and Mr. Booth, to whom was referred a communication, by Dr. Hare, entitled "On the Change effected in the Nitrates of Potash and Soda, by the limited application of Heat, with a view to obtain pure Oxygen; and, also, on a Liquid and a

Gaseous Ethereal Compound, resulting from the reaction of Nascent Hyponitrous Acid on Alcohol," &c., reported in favour of publication in the Transactions of the Society, and the publication thereof was ordered accordingly.

The Committee, consisting of Dr. Patterson, Prof. Henry, and Mr. Walker, to whom was referred a letter, addressed by Dr. John Locke to Prof. Bache, containing observations to determine the Horizontal Magnetic Intensity and Dip, at Louisville, Kentucky, and Cincinnati, Ohio, reported certain extracts for publication.

After describing the apparatus used in these observations, Doctor Locke states, in detail, the results of two series of observations, each made with three horizontal needles, and concludes from the mean of them, that the relative horizontal intensities at Louisville and Cincinnati, are as 1 to 0.9727. The dates of the observations were March 7th, 10th, 11th, and 14th, 1840, at about noon of each day. The correction for temperature, in each of the three needles used, was obtained by experiments which are fully described, and which gave the following coefficients:—for needle No. 1, 0.000125, for No. 2, 0.000145, No. 3, 0.000058.

The magnetic dip at Cincinnati, as determined by two series of observations, each with two needles, in March, 1840, was $70^{\circ} 25'.5$, and by one series, in April, $70^{\circ} 28'.8$, and the dip at Louisville, by three series, at nearly the same date, in March, $69^{\circ} 54'.9$.

The relative total intensities thus deduced for a period corresponding to March 10th, 1840, are, Cincinnati, 1.000, Louisville, 1.003.

A communication was read from Mr. C. G. Forshey, of Louisiana, entitled "An Account of the Great Mound near Washington, Adams county, Mississippi," which was referred to a committee.

Mr. Du Ponceau presented to the Society a Manuscript by the late Mr. Heckewelder, containing the names of various trees, shrubs and plants, in the Lennape (Del.) language, which was referred to the Historical and Literary Committee.

Dr. Horner read a communication entitled "Note of the Remains of the Mastodon, and some other extinct Animals collected together in St. Louis, Missouri. By W. E. Horner,

M.D., Professor of Anatomy in the University of Pennsylvania," which was referred to a committee.

Mr. Ord directed the attention of the Society to the following passage in Audubon's "Birds of America." Article, *Small-headed Flycatcher*.

"When Alexander Wilson visited me at Louisville, he found, in my already large collection of drawings, a figure of the present species, which, being at that time unknown to him, he copied, and afterwards published in his great work, but without acknowledging the privilege that had thus been granted to him. I have more than once regretted this, not by any means so much on my own account, as for the sake of one to whom we are so deeply indebted for his elucidation of our ornithology."

"This attack upon the reputation of a member of this Society," said Mr. Ord, "one who, during the long period that he dwelt amongst us, was noted for his integrity, ought not to be suffered to pass without examination."

Mr. Ord submitted to the inspection of the Society, Wilson's Autograph Diary of his journey from Philadelphia to New Orleans, via Pittsburg and Louisville, commencing on the 30th of January, 1810. From this diary it appears, that he arrived at Louisville on the evening of Sunday, the 18th of March; and departed thence for Frankford and Lexington, on the morning of Friday the 23d. During his stay at Louisville, he was occupied three days in soliciting subscribers, and endeavouring to get materials for his work, and one day he was employed in writing to his friends at home. Four days, consequently, were passed in Louisville, one afternoon of which was devoted to shooting, in company with Mr. Audubon; and a portion of a morning was appropriated to examining that gentleman's collection of crayon drawings; in which Wilson states he saw the figures of two new birds, both *Motacilla* or Warblers; but he does not state that he saw a figure of a *Muscicapa* or Flycatcher. He does not say a word respecting the loan of Mr. Audubon's drawings, nor does he give the least reason to suppose that he made a copy of any of the drawings; on the contrary, he positively asserts that he did not get one *new* bird at Louisville.

Mr. Ord proceeded to examine the style of both Audubon's and Wilson's drawings, and pointed out the peculiarities of each author. He declared, that the figure of Wilson's Small-headed Flycatcher differs in no respect from his ordinary style; that it bears the signet of paternity on its very front. But, as it might be objected that this mode of reasoning is inconclusive, from the circumstance of several of Mr. Audubon's birds bearing a resemblance to those of Wilson, Mr. Ord obviated this objection, by stating that Mr. Audubon had not scrupled to appropriate the labours of Wilson to his own use; inasmuch as the figure of the female March Blackbird, (Birds of America, plate 67,) and that of the male Mississippi Kite, (same work, plate 117,) had both been copied from the American Ornithology, without the least acknowledgment of the source whence they had been derived. Mr. Ord thought that the charge of plagiarism came with an ill grace from one who had been guilty of it himself, as in the instances above mentioned.

Wilson states, that he shot the bird figured and described in his 6th volume,

page 62, in an orchard, on the 24th of April. Mr. Ord confirmed this statement, by declaring to the Society, that he himself was with Wilson on the day in question; that he saw and examined the specimen; and that Wilson assured him it was entirely new to him. Wilson was then residing at the Bartram Botanic Garden, near Philadelphia.

Mr. Ord farther read to the Society a letter addressed to him by the artist, Mr. Lawson, who engraved the plate in which the Small-headed Flycatcher is figured. This gentleman affirms, that all the plates, which he engraved for the American Ornithology, were from Wilson's own drawings; and that with respect to the plate in which the Small-headed Flycatcher appears, *specimens* of all the birds there represented accompanied the drawings; and he, after getting his outline, *worked from them*. Mr. Ord laid before the Society a proof of the etching of this plate, and remarked, that from the minuteness of the details, the *point* of the engraver had evidently a greater share in producing the desired result, than even the pencil of the ornithologist.

Mr. Lea, from the Publication Committee, reported, that the first part of the 7th volume of the Transactions of the Society was completed, and presented a copy thereof for the inspection of the members.

Mr. Vaughan stated, that agreeably to the instructions of the Society, he had purchased the Anamitic and Latin, and Latin and Anamitic Dictionaries, lately published by the Right Reverend Father Taberd, Bishop of Isauropolis, and Vicar General of Cochin China; in two volumes, 4to. Serampore, 1838. (See Proceedings of July 3.)

Dr. Hays made an oral communication relative to the operation recently devised for squinting, and to its effects in modifying the adjusting power of the eye for near and distant objects.

Dr. Hays stated, that certain phenomena which he had observed in one of the cases in which he had divided the internal rectus muscle, for the cure of squinting, seemed to favour the theory of the adjustment being made by an alteration in the form of the eye, under the conjoint action of the four recti muscles; a theory rejected by the best physiologists of the day.

The case, the details of which Dr. Hays related, was that of a gentleman thirty-six years of age, who had squinted with his left eye since the age of five years. Both the eyes were presbyopic; the left, however, was most so, and required for distinct vision a glass three Nos. higher than the other eye; the respective Nos. being 11 and 14. Vision with the left eye, even by the aid of a glass, was not

perfect, words printed in long primer being scarcely legible. After the division of the internal rectus muscle, vision not only improved, but the eye became less presbyopic, and at the present time, three weeks since the operation, said Dr. Hays, the glass (No. 14,) which had been before adapted to the patient's left eye, now magnifies so much, that it is unpleasant to read with it; and he is able to see best with glass, No. 11. On careful comparison, he is unable to perceive any difference in the size of objects viewed with either eye through this glass; and an opera glass, adjusted to one eye, seems equally well adapted for the other. These facts, Dr. Hays remarked, show, that a change has taken place in the left eye, and this probably consists in an elongation of its antero-posterior diameter, resulting from the operation.

Dr. Hays also made some observations on the mode in which squinting causes an impairment of the function of vision, and stated, that from a great number of cases which he had examined, it appeared to him to be a general rule, that the greater the degree of strabismus, the more imperfect is the sight of the affected eye. In all the cases in which he had operated, the sight had been improved.

Dr. Dunglison stated, that he was not prepared to admit, from this single observation, that the accommodating power of the eye is owing to the pressure of the four recti muscles on the eye ball; the division of any one of them not being likely, in his opinion, to rectify the results of compression, if it existed in the case in question. He was disposed to refer a great agency to the contraction and dilatation of the pupil in facilitating distinct vision at different distances, and he alluded to an experiment made on one of his own eyes whilst a student of medicine. This consisted in applying some freshly prepared extract of belladonna to the eyelids. The consequence was, that the pupil soon became so much dilated, that the iris was almost invisible. The focus of this eye was found to be at twice the distance of that of the sound organ; but in proportion as the effects of the belladonna passed off, and the pupil approached its natural size, vision became more and more distinct, and the focus nearer the natural. In the open air, all objects, except those near, were distinctly seen, but on entering a room, every thing was obscured.

Dr. Dunglison expressed the belief, that squinting is often owing to impairment of vision in one eye, in consequence of a want of correspondence in the sensibility of the two retinæ; the mind, therefore, acquires the habit of attending to the impression made on the sound eye only, and the other, being neglected, is drawn into a position to interfere, as little as possible, with the better vision of its fellow.

Professor Bache alluded to a case of strabismus, which seemed to him to favour a suggestion thrown out by Dr. Hays, that defective vision in the inverted or everted eye, might be owing to stretching of the optic nerve. In this case the eye became everted; and simultaneously, vision with it was impaired. Ultimately, indeed, the sight of both eyes was lost.

Professor Bache communicated the following observations made by Mr. Rümker, Director of the Observatory of Hamburg, on the second comet of Galle.

Longitude of the Observatory of Hamburg, 39m. 54s. E. of Greenwich.

Date. 1840.	Mean Time at Hamburg.			Apparent AR of Comet in Time.			Apparent Declinat. of Comet in Ascen.			Number of Observations.
	<i>h</i>	<i>m</i>	<i>s</i>	<i>h</i>	<i>m</i>	<i>s</i>	°	'	''	
January 29	9	55	28.89	21	17	51.990	62	18	59.15	13
" 30	8	11	23.07	21	31	31.545	61	55	28.19	15
February 2	15	47	45.98	22	16	53.236	59	55	35.53	15
" 3	8	58	46.24	22	25	51.671	59	23	38.57	12
" 4	12	45	54.87	22	39	52.004	58	28	7.73	4
" 8	8	38	19.30	23	19	35.128	55	1	12.81	14
" 9	7	59	24.03	23	28	23.452	54	4	3.05	11
" 11	8	30	24.43	23	45	9.317	52	2	24.91	14
" 12	6	59	54.97	23	52	16.184	51	5	23.71	11
" 13	6	37	19.04	23	59	19.388	50	4	58.17	4
" 17	7	27	39.88	0	24	28.638	45	59	10.16	7
" 20	10	24	44.96	0	40	30.642	42	54	50.14	9
" 21	8	27	9.89	0	44	44.511	42	2	10.16	5
" 22	7	36	19.92	0	49	0.566	41	7	51.14	8
" 23	10	19	4.72	0	53	42.774	40	6	6.82	5
" 24	7	21	20.47	0	57	13.625	39	18	17.17	9
" 25	6	44	58.76	1	0	58.806	38	26	14.25	2
" 28	7	44	8.40	1	11	43.889	35	50	13.13	11
" 29	7	30	35.35	1	14	57.249	35	1	34.78	11
March 1	7	52	35.50	1	18	8.888	34	9	25.57	3
" 3	7	30	17.55	1	24	1.221	32	40	4.76	10
" 4	7	18	0.15	1	26	48.581	31	55	31.03	11
" 5	7	36	57.85	1	29	32.423	31	10	41.80	10
" 6	7	25	47.30	1	32	8.990	30	28	10.08	9
" 7	7	41	29.37	1	34	42.030	29	45	41.59	7
" 9	7	35	22.20	1	39	32.121	28	24	27.00	8
" 11	7	45	35.77	1	44	5.870	27	6	18.05	7
" 16	18	4	11.57	1	54	28.674	24	5	17.24	6
" 17	8	5	25.47	1	56	24.191	23	31	20.68	2
" 18	8	0	6.46	1	58	15.616	22	58	12.00	16
" 20	8	26	38.67	2	1	52.951	21	53	17.10	3
" 21	7	53	58.95	2	3	37.332	21	22	54.45	8
" 22	7	52	56.85	2	5	19.245	20	52	0.14	4
" 24	8	17	15.92	2	8	41.044	19	51	52.52	8

Mr. Justice stated to the Society, that the Astronomical Instruments ordered for the High School Observatory, from München, had arrived, and invited the members to inspect them. Whereupon, Professor Bache proposed the following resolutions, which were adopted by the Society.

Resolved, That the Committee on Astronomical Observations be requested to examine the instruments recently imported from München, for the Observatory of the Central High School, by the Controllers of the Public Schools, and to report in relation to them to the Society.

Resolved, That the same Committee be requested to consider and report to the Society, the best application of the sum of money in the possession of the Society, which was collected for the erection of an Astronomical Observatory.

Mr. Vaughan reported the death of Lucien Bonaparte, Prince of Canino, a member of the Society, aged 66.

A letter was read by Mr. Vaughan from Mr. Charles P. Fox, presenting to the Society, in his own name, and that of his sisters, the collection of the original letters and papers of Benjamin Franklin. (See Proceedings, July 17.)

On motion of Mr. Ord, the Secretary was directed to transmit to Mr. Fox a special vote of thanks for his valuable donation.

Stated Meeting, October 2.

Present, twenty-nine members.

DR. CHAPMAN, Vice President, in the Chair.

The following donations were received:—

FOR THE LIBRARY.

Royal Society. Report of the Committee of Physics, including Meteorology, on the objects of Scientific Inquiry in those Sciences. Approved by the President and Council. 8vo. London, 1840.—*From Mr. Petty Vaughan.*

Monument de Yu, ou la plus Ancienne Inscription de la Chine, suivie de trente-deux formes d'Anciens Caractères Chinois, &c. Par Joseph Hager. Fol. Paris, 1802.—*From Mr. Du Ponceau.*